Virtual Advanced Network Packet Broker

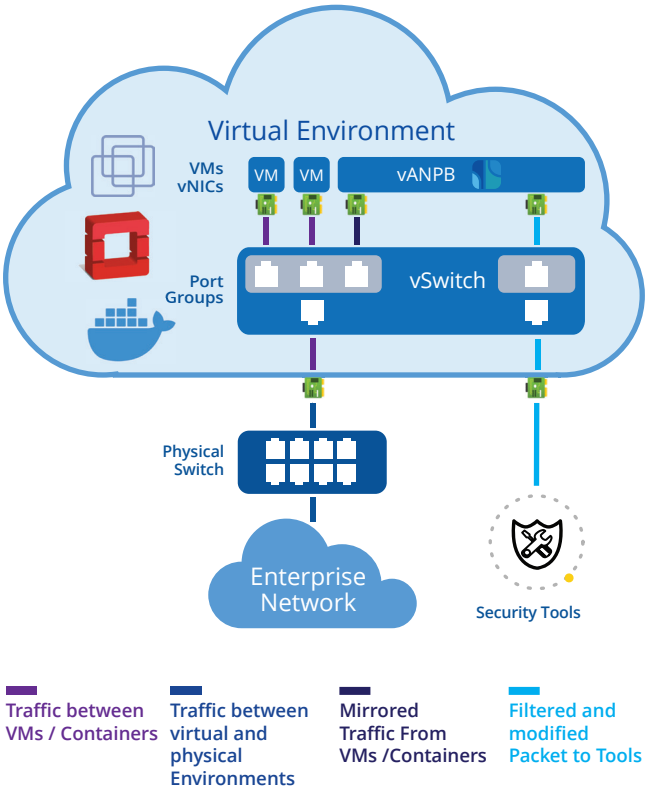
Product Overview

vANPB is part of CGS **Tera-Pro™** that optimizes cyber security and performance monitoring applications by delivering the **required data** in the **right volume** and the **correct format**.
The massive migration from the physical to the virtual environments creates new performance and cyber security challenges to network administrators as they lose visibility to the network traffic in the virtual environment and the ability to control it with their existing physical monitoring, analysis, and security tools.
Moreover, as some tools are now becoming available as virtual instances, there is a need to TAP and filter traffic between them and the virtual switches.

The **vANPB** addresses the visibility challenges of virtual environment by offering Advanced Network Packet Broker in the market, with both virtual and physical links. Allowing network administrators to leverage the rich network visibility functionality as they balance IT resources across both environments.
It can meet the basic aggregation and filtering requirements as well as advanced features such as Load Balancing Header Stripping, Deduplication, Data Masking, Packet Slicing, Timestamping, Data Capture, De-Fragmentation, Subscriber Correlation 3G/4G/5G**.

Key Features

- Connects to physical and virtual NICs
- Virtual Environments: ESXi, OpenStack, Docker Container
- Aggregation, Filtering, Load Balancing Header Stripping, Deduplication, Data Masking, Packet Slicing, Time Stamping, Capture & Replay, De-fragmentation, Drop/Pass IP list and String/URL/Regular expression/L7 (DPI*, Application) Filtering, VXLAN/GRE/ERSPAN tunneling, Sampling, Egress buffering and shaping, NetFlow/IPFIX*, GTP Correlation*.
- Unified management including CLI, SNMP, WEB UI, Net CONF and REST API



Use Cases

- Enable network visibility to virtual network traffic
- Leverage physical monitoring tools when migrating to virtual environments
- Single appliance with basic and advanced packet broker features for small sites
- Optimize virtual and physical monitoring tools by filtering data
- Balance between physical and virtual monitoring tools
- GRE/VXLAN/ERSPAN Termination from/to virtual and physical environments

CGS Tower Networks Ltd
15 Hamelacha Street, Rosh Haayin, Israel, 4809136 | info@cgstowernetworks.com
Contact Us
www.cgstowernetworks.com

Features	Benefits
Aggregation	Aggregate and redirect network traffic for further processing. One-to-One, One-to- Many, Many-to-Many
De-duplication	Eliminates duplicated packets gathered from multiple collection points based on a window per packet signature and configurable window size
Filtering	Filter out unnecessary network traffic with conditional L2-L7 including: 5-tuple classifiers, URL & Applications (DPI*) filtering, subscriber qualifiers
Tunneling	Interconnects virtual environment or network equipment using NVGRE/L3GRE/VXLAN termination
AND/OR/NOT Operators	Simplifies packet broker operation with logic filter actions
Header Editing	Enable device tracking, identification, or authentication by replacing MAC/VLAN/IP/PORT
Regex Filtering	Filters traffic by matching patterns and strings defined by the use of regular expressions
Load Balancing	Maximize the return on tools by performing symmetric/asymmetric load balancing of network traffic to multiple tools with configurable hashing including complex tunnel traffic such as MPLS, GTP, L2TP, GRE, PPPoE, VXLAN, IMSI, IMEI, MS-ISDN
Session Tracking	Ensures that the entire stream of packets associated with the matched pattern will be sent to the egress tool
Port Labelling	Adds / removes / replaces tag to mark & track Ingress port or flow
Data Masking	Protects sensitive data by overwriting it before it is sent to the tools

Features	Benefits
Packet Slicing	Improve monitoring and network data analysis performance by reducing packet size and maintaining the required packet slice for further processing
Sampling	Reduces traffic load by flow sampling
Capping and Shaping	Capping and shaping limits Egress port rate, while Shaping buffers burst to eliminate drops
Header Stripping	Remove protocol headers (MPLS, VLAN, PPPoE, QinQ, VN-TAG, VXLAN, GENEVE, PBB, Fabric-Path/CFP, GRE, GTP, ERSPAN) to offload resources and accommodate tools that cannot handle traffic
GTP Correlation*	Subscriber correlation 3G/4G/5G** networks (IMSI, IMEI, MS-ISDN).
Time Stamping	Enhances network visibility with nanosecond time stamping capabilities
Capture & Replay	Capture Traffic in PCAP files format with filter granularity, and replay captured files through filter logic for further analysis
IPFIX/NetFlow*	Generation and distribution of IPFIX/NetFlow flows supporting up to 16 different IPFIX profiles including L7 classifiers, that can each be configured separately and attached to any filter.
Metadata	Generation of metadata flows and distribution with Syslog and Kafka
De-Fragmentation	Assemble packet fragments to complete packets
User Management	Support both local and remote management with Radius and TACACS+
Management	Web UI, CLI, SNMP, NETCONF, REST API

For more information about the products and support programs please contact us at info@cgstowernetwoks.com

*Requires license
** Q1 2024

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